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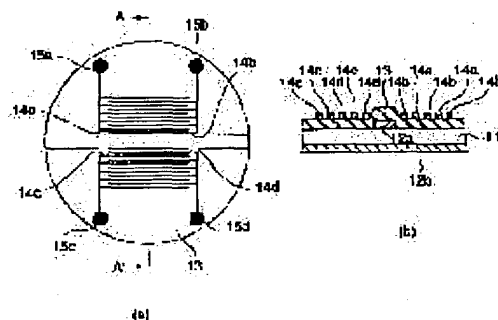
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## (54) SUPERCONDUCTIVE ELEMENT

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To increase the Q value of a superconductive element which contains a superconductive resonance element, a dielectric member which is added to the resonance element and varies its dielectric constant according to the applied voltage and an electrode which applies the voltage to the dielectric member by setting the electrode and a strip conductor to satisfy a prescribed relation between them.

**SOLUTION:** The YBCO superconductive films 12a and 12b are formed on both upper and rear side surfaces of an LaAlO<sub>3</sub> monocrystal substrate 11. The film 12a formed on the upper surface of the substrate 11 is processed into a stripe shape as a strip conductor 12a. Then an SrTiO<sub>3</sub> film 13 of 1  $\mu$ m is formed on the upper surface of the substrate 11, and the conductive films are formed and processed into the comb-line electrodes 14a to 14d on the film 13. In such cases, the size of an area where the conductor 12a is overlapping the electrodes 14a to 14d is set less than 20% of the area size of the conductor 12a when viewed at a point set above a superconductive element.



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